

will be regurgitated. The safest and best method is by peroral gastroscopy. When a skilled endoscopist is not available external operation by a skilled surgeon is safer and more successful. When a number of bodies is in the stomach, as frequently happens in the insane, external operation is the best procedure.

**Physical Defects in Children.**—EMERSON (*Am. Jour. Dis. Children*, March, 1921) examined 607 children. He found that children reported to be sufficiently well to attend school and to engage in the activities of normal children were found to average 5.2 physical defects of all kinds and 2.5 of nasopharyngeal defects. Children brought to a hospital clinic for examination and treatment showed an average of 6.8 general defects and 3.5 nasopharyngeal defects. The distribution of defects according to age was remarkably uniform. In each group studied the largest number of children were between the ages of seven and nine years. These years showed the greatest average number of defects in the Massachusetts General Hospital group as 7.2, but in the Little Wanderers' Home group the highest average number of defects, 6.0, was found from ten to twelve years. Only nine children in the 602 were free from defects. The nasopharyngeal defects appeared in a large number of cases and also totaled a greater number of defects than any other group.

**Stigmata of Predisposition to Bone and Joint Tubercle.**—RIVERS (*British Jour. Dis. Children*, October to December, 1920) says that denial or neglect of intrinsic predisposition to bone and joint tubercle betokens not only the lack of clinical insight but an unfamiliarity with the literature. It would seem that a part of such a predisposition is not due to a single undefined susceptibility but was multiform and made up of several abnormalities acting probably by mechanical facilitation of infection or else associated with other undiscovered abnormalities acting in a like manner. For the facts and findings concerning pigmentation, ichthyosis, nasal defect and mental unsoundness they are best explained in the light of intrinsic contributory causes. There are obviously several practical bearings, diagnostic, prophylactic and others. There is also a eugenic aspect which is rather important. The author feels that no tuberculous ichthyotic, unless of great intellectual attainments, and no tuberculous mental defective, should be allowed to reproduce.

**Roentgen-ray and Tuberculosis in Infants and Children.**—O'BRIEN and AMES (*Jour. Am. Med. Assn.*, May 28, 1921) studied forty-four infants and children. They found that the von Pirquet and intracutaneous skin reactions were reliable tests of infection with the tubercle bacillus and the number of positive reactions increases from infancy up to childhood, all their patients over ten years of age reacting. In twenty-six of thirty-six positive skin reactions the roentgen-ray disclosed the site of infection to be intrathoracic. D'Espine's sign as a clinical index of tuberculosis of the bronchial lymph glands is of relative value, being elicited only eleven times as against roentgen-ray evidence of tuberculosis in twenty-eight cases. Three cases of positive sputum were found in fourteen diagnoses of chronic pulmonary tubercu-

losis. Fourteen cases of chronic pulmonary tuberculosis of the adult type were found. Fifteen cases that were negative clinically showed definite roentgen-ray evidence of structural changes of tuberculous infection. This raises the question as to whether these children are not liable to develop clinical tuberculosis, and they should be watched carefully and roentgen-rayed frequently.

**Exercise Tolerance of Children with Heart Disease as Determined by Standardized Test Exercises.**—WILSON (*Jour. Am. Med. Assn.*, June 11, 1921) found that the circulatory reactions after test exercises in 45 normal children and in 116 children with heart disease confirmed the results of the study of a previously reported group of 20 normal children. A working table was formulated of standardized test exercises followed by normal systolic blood-pressure curves without symptoms of dyspnea and fatigue. It was standardized from an analysis of the reactions of an average group of 65 normal children according to age, weight and height. The degree of distress and type of systolic blood-pressure curve following the standardized test exercises was used as a gauge in estimating the exercise tolerance of children with heart disease. Of the 71 children having definite organic heart disease without symptoms of insufficiency, 69 per cent had a normal tolerance for standardized test exercises, 29 per cent had fair tolerance and 2 per cent had a poor tolerance. In children with chronic organic heart disease, exercise tolerance tests give important and useful information which may be utilized as a scientific basis for intelligent regulation of the child's activities. The observations resulting from this investigation would seem to indicate that the fear of exercise is unwarranted and that a wider latitude may be permitted with safety.

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## OBSTETRICS

UNDER THE CHARGE OF

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**Pregnancy Complicated by Pyelitis.**—BAUGHMAN (*Am. Jour. Obst.*, February, 1921, p. 436) reports three cases of pregnancy complicated by pyelitis. These patients were under observation for a considerable time, were treated by lavage of the pelvis of the kidney and pyelograms were taken from time to time as the pelvic size changed. They were private patients treated in a private hospital. The first was a multipara who, during her second pregnancy, had slight nausea at first, which later became severe, with persistent vomiting. There was pain over the abdomen and back, with the greatest tenderness over the right kidney. There was no elevation of temperature and the urine obtained by the catheter was acid, with a few pus cells. The *Bacillus coli communis* was found on examining the urinary tract, and the patient was treated by irrigation of the pelvis of the kidney. This was followed by increased appetite and improved general condition, and at the fifth irrigation a pyelogram of the kidney was taken. This showed great

distention of the right kidney, pelvis and ureter; moderate distention of the left pelvis and ureter. Both ureters were kinked and tortuous. At the sixth irrigation the patient suffered considerably; her appetite was impaired and she was nauseated. Labor was accordingly induced, and after the birth of the child five irrigations were given, the first fourteen days after delivery. The patient passed through an attack of cystitis, which was treated by daily irrigation of the bladder, followed by instillations of mercurochrome. The patient ultimately made a complete and satisfactory recovery. The second case was that of a primipara who had severe pain in the back and right side and a temperature as high as  $104^{\circ}$  F. There was frequent urination followed by burning sensation. Three chills occurred in one day. The leukocytes were 16,000; the urine was acid, with a trace of albumin and some pus cells. During the acute attack the patient suffered from nausea. After three irrigations of the bladder the patient seemed better, but after the fourth there was much nausea for two days. The fifth irrigation was given with mercurochrome, which seemed very little irritating, and it was then possible to make a picture of the kidneys. This showed the left pelvis and ureter moderately distended, the right pelvis and ureter more dilated than the left, the kink in the ureter below the pelvis, but below that point there was dilatation. The vertebral column of the fetus was shown in such a position as probably to interfere with the emptying of the pelvis of the kidney on that side. The patient seemed to improve until the ninth irrigation, when it was found that the pelvis of the right kidney was not draining. A pyelogram taken showed moderate dilatation of both kidney pelves, especially marked on the right side. The ureters in the upper part were distorted. After the twelfth irrigation, of 2 per cent. of nitrate of silver solution, against the advice of the physician the patient went home immediately after the irrigation. She suffered considerable pain and had a restless night. Labor began, the child was born asphyxiated, was resuscitated with difficulty, but died a few hours later. Eleven days after delivery irrigation was again resumed with a fairly good result. A pyelogram showed ureters normal, the left pelvis in good condition, the right pelvis of the kidney only partially filled, with accumulation of solution in the calyces. It was thought that possibly the right kidney was smaller than the left. The patient's general condition was good. His third case was that of a multipara who suffered from severe nausea and vomiting for a period of ten days. There was pain in the back and abdomen and great tenderness over both kidneys, especially the right. The urine was acid, with pus and red blood cells; there was moderate elevation of temperature and mucus in the discharges from the bowel. On examination the blood leukocytes were 8000. The patient was considerably improved by three irrigations, when she began to have attacks of sweating. After the fifth irrigation it was possible to take a pyelogram, when the right pelvis and ureter were found greatly distended. The left was normal. The patient was treated with several irrigations, which seemed to produce benefit. Following the taking of a pyelogram, vomiting, headache and nausea returned to a considerable extent and the catheter was left in the pelvis of the right kidney for two hours after one of the irrigations. The patient seemed better for the treatment, and as the child was viable and the pelvis of the left kidney showed signs of becoming involved, labor was induced. The birth of the child was normal and fourteen days

after delivery the mother again received irrigation, and a pyelogram was made. There had been some improvement in the condition of the pelvis of the right kidney, and there was a kink in the right ureter near the pelvis. The patient finally went to her home and another examination made later showed a slow but definite improvement. Repeated examinations during the next few weeks showed that the patient's condition had reached a point where it was almost normal. These cases illustrated the fact that the pelvis of the right kidney is more often involved. In two of these patients the bladder was very constantly involved; in one case inflammation of the bladder was occasionally present. In two of the cases the colon bacillus was the exciting cause and in one the *Staphylococcus albus*. The pelvis of the kidneys were almost of the same size as regards right and left. Irrigation seemed uniformly useful. Apparently the ureters had been obstructed by the pressure of the pregnant uterus because there was marked improvement after delivery. It was interesting to observe that the right kidney in one case was congenitally small and that there was a compensatory increase in the function of the other kidney. In the puerperal period irrigation was well borne as early as two weeks after the birth of the child. Fever was absent with these patients, which seemed unusual in view of the severity of some of the symptoms. Apparently the pelvis of the kidney may become greatly distended and yet resume its normal condition. In one case 100 cc of urine were obtained from the pelvis of one kidney. It is interesting to note that when labor was induced at a selected time, when the condition of the mother was good, that the children were born living. When labor developed without induction the child was stillborn. In discussion it was stated that, owing to the mechanical conditions in pregnancy, there was frequently stasis, followed by lowered resistance, migration of bacteria and infection of the kidney. The last usually comes directly from the colon and the bacteria found are colon bacilli. A mixed infection sometimes occurs. When the colon bacillus and staphylococci are both present there is more resistance to treatment. Good results have been obtained by the introduction of the ureteral catheter, leaving it twelve hours at a time. This apparently gives better results than irrigation, as irrigation seems to increase the dilatation of the damaged kidney. It is valuable to vary the position of the patient in treating and studying these cases. After recovery has apparently occurred, if the patient has slight disturbance in the functions of the kidneys and bladder bacteria will often be found in the urine. An important cause in the development of infection of the urinary tract is retention of urine in the bladder, and in these cases care must be taken to avoid that. In local treatment nitrate of silver is especially valuable, following thorough irrigation with boric acid to clear away the urine. If this is not done the silver will not be precipitated by the chlorides. In these cases the ureters, where they go into the bladder, are intensely congested, and this is also true to a lesser extent throughout their entire course. Nitrate of silver is not only a good antiseptic but a valuable astringent. After a severe labor cystitis and infection of the kidney may develop, because of mechanical injury during labor. Retention of urine and bad drainage from the kidney are usually the important factors in such a case. These patients often improve very slowly, and it may be necessary to carry out treatment energetically and for some time.